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Satellites and Municipalities: One Town's Use of Google Earth for Residential Surveillance

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SATELLITES AND MUNICIPALITIES: ONE TOWN'S USE OF GOOGLE EARTH FOR RESIDENTIAL SURVEILLANCE

by Edward Knoedler[*]

I. INTRODUCTION

An August 1, 2010 article that ran in Newsday, a Long Island based newspaper, created a firestorm of controversy when it told the story of a municipality, the Town of Riverhead, utilizing Google Earth to nab code violators.[1] This article was picked up by major news databases and publications across the nation, sparked debates on Good Morning America as well as Fox News with Sean Hannity, and outraged civil libertarians who believe that the use of satellite imaging by the government is another step towards an Orwellian "Big Brother" society.[2] As a result of the national attention, the municipality eventually ended its program.[3] Shortly thereafter, the Town Board of Riverhead passed a resolution and adopted a policy concerning the use of satellite imaging services, such as the internet

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[1] Mitchell Freedman & Will Van Sant, *Riverhead Tracks Pools with Google*, NEWSDAY, Aug. 1, 2010, at A6, *available at* 2010 WLNR 15272293 (explaining that the Town of Riverhead's Chief Building Inspector utilized Google Earth to "eyeball[] properties . . . and identified those with pools, then compared the list to records of homes with pool permits."). The Town was able to catch approximately 250 homeowners who had swimming pools without the proper permits. *Id.*

[2] *See Good Morning America* (ABC television broadcast Aug. 23, 2010), *transcript available at* 2010 WLNR 16836740; *Hannity Dismisses Patriot Act Concerns, Obsesses About People Seeing Him In A Speedo Via Google Earth*, NEWSHOUNDS.US (Aug. 7, 2010), http://www.newshounds.us/2010/08/07/hannity_dismisses_patriot_act_concerns_obsesses_about_people_seeing_him_in_a_speedo_via_google_earth.php.

[3] *See All Things Considered* (National Public Radio broadcast Sept. 10, 2010), *transcript available at* 2010 WLNR 18048428 (interviewing the Town of Riverhead's chief building inspector and stating "[t]he town of Riverhead has voted to stop using Google Earth satellite images to find backyard pools that don't have proper permits").

application called Google Earth, prohibiting the use of satellite imaging for prosecutorial purposes.[4]

This Comment will address the legal issues and ramifications of using satellite imaging, specifically, Google Earth, by a municipality on its citizens. This first section will give the reader a brief overview of the structure of the paper as well as an introduction to the issues being broached by this comment. Section II will address the history behind the web based satellite imaging product known as Google Earth. Additionally, it will explore the ever broadening uses and applications of satellite imaging in today's society and provide an example of a municipality utilizing Google Earth.

Section III will discuss, what is in all probability, the most significant issue surrounding the use of satellite technology by a municipality on its citizens. The issue is whether the use of this technology is an infringement of an individual's constitutional rights as set forth in the Fourth Amendment.[5] The section will give a brief overview of the history of the Fourth Amendment and its adaptation through the years as science has progressed. This Comment tries to tackle the issue of whether the use of such technology without probable cause would constitute an unreasonable search. Section IV will address the doctrines of "Open Field" and "Curtilage" and how they play a role in determining what constitutes an invasion of privacy. Additionally, two recent cases, *Dow Chemical Company v. United States*[6] and *California v. Ciraolo*,[7] and their subsequent effect on the issue at hand will be discussed. Section V will discuss the characteristics of a municipality, the extent of a municipality's power to regulate its citizens and the scope of municipal liability. It will be explained that liability hinges upon whether a municipality owes a duty to its citizens to use every legal means at its disposal to ensure a safe environment. If this rings true, then not utilizing Google Earth could be deemed negligence on the municipality's behalf.

This Comment will conclude that while the present use of

[4] Riverhead, N.Y., Res. 709 (2010), *available at* http://www.riverheadli.com/TBM.09.08.10.pdf (last visited Nov. 12, 2010).

[5] U.S. CONST. amend. IV (guaranteeing "[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause . . . and particularly describing the place to be searched, and the persons or things to be seized").

[6] Dow Chem. Co. v. United States, 476 U.S. 227 (1986).

[7] California v. Ciraolo, 476 U.S. 207 (1986) [hereinafter *Ciraolo I*].

Google Earth by a municipality to regulate its' citizens may not be a popular policy, it is not overly intrusive and not a violation of any constitutional right.

II. GOOGLE EARTH: SATELLITE TECHNOLOGY & ITS BROADENING SCOPE OF USE

A. A Brief History of Google Earth

Initially, satellite imagery was exclusively available and utilized by the military and related government agencies.[8] However, over the past several years, there have been major technological advances with regard to satellite based technology. Due to these advancements, the technology has become affordable and available to the general public.[9] As a result, global positioning devices are now commonplace among consumers and aerial imagery has been replaced by satellite imagery. Satellite images are now available online, in most instances free of charge, and can be viewed by the public on such websites as Yahoo, Bing, and Google.[10] These websites utilize this tool as a way to draw traffic to their respective domains, with the larger websites providing the most detailed and up-to-date images.

Google, since its inception, has risen to become the world's largest search engine.[11] In the United States alone, Google sites

[8] Brian Craig, *Online Satellite and Aerial Images: Issues and Analysis*, 83 N.D. L. REV 547, 549 (2007) (stating that Google Earth "started in the intelligence community, in a CIA-backed firm called Keyhole that Google acquired in 2004").

[9] United States v. Garcia, 474 F.3d 994, 998 (7th Cir. 2007) ("Technological progress poses a threat to privacy by enabling an extent of surveillance that in earlier times would have been prohibitively expensive. Whether and what kind of restrictions should, in the name of the Constitution, be placed on such surveillance when used in routine . . . enforcement are momentous issues . . . .").

[10] *See* YAHOO, http://maps.yahoo.com (last visited Nov. 12, 2010); BING, http://www.bing.com/Maps (last visited Nov. 12, 2010); GOOGLE, http://maps.google.com (last visited Nov. 12, 2010).

[11] *Press Release – comScore reports global search market growth of 46 percent in 2009*, COMSCORE.COM, http://www.comscore.com/Press_Events/Press_Releases/2010/1/Global_Search_Market_Grows_46_Percent_in_2009 (last visited Nov. 12, 2010) ("Google Sites ranked as the top search property worldwide with . . . 66.8 percent of the global search market.").

owned a 65.4% market share of searches conducted.[12] As the company grew and technology expanded, new applications were added to its inventory. In February 2005, Google Maps went live, and by April this service provided satellite views.[13] A more advanced version of Google Maps soon followed, aptly named Google Earth.[14]

Google Earth is "a satellite imagery-based mapping service combining 3D buildings and terrain with mapping capabilities and Google search."[15] The basic version is a free service that requires only a download of the application and is widely utilized by the public with an estimated 200 million users.[16] An advanced version of Google Earth, Google Earth Pro, can be purchased for a $399 annual subscription.[17] However, both versions utilize the same image database with most images being an aerial view about 800-1,500 feet above ground.[18] The visual imagery in Google Earth is updated on a rolling basis, not in real time, with new additions monthly, and typically one to three years old.[19] Google Maps and its progeny are considered the "most popular source of web-based free satellite images."[20]

A new add-on to Google Maps and Google Earth is called Street View. Street View, which launched in April 2008, depicts panoramic images along roadways and in public places.[21] Google utilizes cars equipped with cameras that take pictures as they drive

[12] *Press Release – comScore releases August 2010 US search engine rankings*, COMSCORE.COM, http://www.comscore.com/Press_Events/Press_Releases/2010/9/comScore_Releases_August_2010_U.S._Search_Engine_Rankings (last visited Oct. 2, 2010).

[13] *Corporate Information: Google Milestones*, GOOGLE, http://www.google.com/corporate/history.html (last visited Oct. 2, 2010).

[14] *Id.*

[15] *Id.*

[16] Craig, *supra* note 8.

[17] GOOGLE EARTH, http://earth.google.com/support/bin/answer.py?hl=en&answer=21406 (last visited Oct. 2, 2010). The support section of Google Earth explains how Google Earth Pro utilizes higher resolution imagery, 4,800 pixels, as opposed to the 1,000 pixels utilized by the basic version of Google Earth; furthermore, the Pro version is faster, automatically geo-locates import images and designed for use by consultants and businesses by including site-wide installations. *Id.*

[18] GOOGLE EARTH, http://earth.google.com/support/bin/answer.py?answer=176172&cbid=3vu7gqxvryud&src=cb&lev=%20answer (last visited Oct. 2, 2010).

[19] *Id.*

[20] *Where to See Free Satellite Images*, TOPBITS.COM,http://www.tech-faq.com/where-to-see-free-satellite-images.html (last visited Oct. 2, 2010) (stating that this product does not have to be downloaded but "can be directly used from the web browser").

[21] *Google Milestones*, *supra* note 13.

along public thoroughfares.[22] This allows the user of Street View to see the image of a particular place as if they were standing on the street. This application has created a lot of controversy and even sparked litigation, most notably the case *Boring v. Google Inc*.[23] The Borings, a couple living in Pennsylvania, sued Google over its "Street View" application claiming, among other things, invasion of privacy.[24] The court granted Google's motion to dismiss the Borings' invasion of privacy claim.[25] In defending the lawsuit, Google asserted that this imagery is no different from what one can observe by walking or driving down a street.[26] It is important to note that this holding could have a direct effect on cases pertaining to imagery found on Google Maps or Google Earth. While these applications do not depict images that are readily observable from a roadway, they do, however, depict images that are readily observable from anyone within publicly navigable airspace.

B. Google Earth: Uses and Applications

The availability and accessibility of programs that utilize satellite imagery has led to a burgeoning new market that has affected many industries.[27] Users of Google Earth, both public and private, are finding and implementing this technology in new and creative ways.[28] Law enforcement agencies have increasingly utilized satel-

[22] Boring v. Google Inc., 362 F. App'x 273, 276 (3d Cir. 2010).

[23] *Id.* at 273.

[24] *Id.* at 276 ("The Borings, who live on a private road in Pittsburgh, discovered that Google had taken 'colored imagery of their residence . . . without obtaining any privacy waiver or authorization' . . . [and] assert[ed] claims for invasion of privacy, trespass, injunctive relief, negligence, and conversion.").

[25] *Id.* at 283.

[26] *Id.* at 276 (asserting that "the scope of Street View is public roads") (internal quotation marks omitted).

[27] Craig, *supra* note 8, at 553 ("Some of the industries that can . . . benefit from Google Earth . . . include commercial real estate, residential real estate, architecture/engineering, insurance, media, defense/intelligence, homeland security, public sector, and state and local government.").

[28] *See, e.g.*, Muhammed v. Martoccio, No. 3:06-cv-1137 (WWE), 2010 WL 3718560, at *3 (D. Conn. Sept. 13, 2010) (explaining how the court utilized Google Maps to determine the driving distance between attorney's offices for the purpose of figuring out fees for driving time); People v. Appice, No. A118369, 2009 WL 2634758, at *3 (Cal. Ct. App. Aug. 27, 2009) (describing how an accident reconstruction expert utilized Google Earth to determine speed of impact of car at time of crash and the distances where the driver lost control); *Egyptian Desert Expedition Confirms Spectacular Meteorite Impact*, SCIENTIFIC COMPUTING, http://www.scientificcomputing.com/news-DS-Egyptian-Desert-Expedition-

lite imaging in their enforcement of laws and apprehension of criminals. It stands to reason that, with corporations and law enforcement agencies employing this technology, it was only a matter of time before municipalities and their departments would find uses for it as well.[29]

Recently, there have been three notable examples of municipalities utilizing satellite imaging, namely Google Earth, to enforce their laws. First, as an alternative to helicopters, officials in Greece were reportedly using satellite imagery to locate homes with undeclared pools as a means to find tax evaders.[30] Second, code enforcement officials in Mecklenburg County, North Carolina were said to be utilizing aerial images and services, such as Google Earth, to verify complaints concerning code violations.[31] Third, the Town of Riverhead was noted as using Google Earth to sweep the town for illegal pools.[32] Of these news stories, the use of satellite imaging by the Town of Riverhead seemed to generate the most controversy. This is partly because the policy of Greek officials has no bearing on American citizens, as it is far from the confines of an American home and is not subject to the United States Constitution. On the other hand, Mecklenburg County is located in the United States; however, its pol-

Confirms-Spectacular-Meteorite-Impact-092710.aspx (last visited Oct. 2, 2010) (stating that a mineralogist spotted a meteorite impact site while doing a Google Earth study); GOOGLE, http://www.google.com/enterprise/earthmaps/industries.html#utm_campaign=en&utm_source=earth-en-biz-gep-ind (last visited Oct. 2, 2010) (describing how Google Earth can be utilized by different businesses, including site surveying by engineering firms, urban planning and infrastructure maintenance by state and local entities, underwriting and claim management for insurance companies and overlay site plans by architecture firms).

[29] Frank Eltman, *How Governments are Using Public Images to Spy on You*, CHICAGO DAILY HERALD, Aug. 15, 2010, *available at* 2010 WLNR 16362319 ("High tech eyes in the sky – from satellite imagery to sophisticated aerial photography that maps entire communities – are being employed in creative new ways by government officials, a trend that civil libertarians and others fear are eroding privacy rights.").

[30] Seth Weintraub, *Greek Government using Google Maps to Find Tax Cheats with Pools*, CNNMONEY.COM (Aug. 2, 2010), http://tech.fortune.cnn.com/2010/08/02/greek-government-using-google-maps-to-find-tax-cheats-with-pools (utilizing Google Maps as a way to help solve their financial crisis because Greek citizens are hiding their assets). Having a pool is a sign of wealth, and while only 324 pools were properly documented, the government found close to 17,000 pools in the suburbs. *Id.*

[31] Russell Nichols, *Google Earth Helps Identify Code Violators in Mecklenburg County, N.C.*, GOVERNMENT TECHNOLOGY (Sep. 2, 2010), http://www.govtech.com/e-government/102484274.html (quoting a county code enforcement manager as saying "[t]he majority of our complaints come in from neighbors complaining about somebody . . . [w]e just use the technology to prove or disprove what's going on in a particular location").

[32] Freedman & Van Sant, *supra* note 1.

icy did not spark controversy because officials in Mecklenburg only utilized Google Earth to "verify" complaints, whereby Riverhead officials used it to sweep the entire town.[33] A "sweep" of all the citizens has a different feel to it, a feeling of regulation and that "big brother is watching," which society is obviously not ready to accept.

This is evidenced by the fact that after the Riverhead controversy brought light to Mecklenburg County's policy, officials there were quick to point out that they do not "snoop around randomly," but use Google Earth to verify complaints from neighbors.[34] In the case of Riverhead, a "sweep" of the entire town was conducted utilizing Google Earth to locate homes with pools.[35] These homes were then cross-referenced with the permits on file with the town to determine if they were conforming to the Town Code.[36] Utilizing this technology, the town caught 250 homeowners who had swimming pools without ever filing the proper permits.[37] Town officials defended this practice on the basis that pool safety is a legitimate concern.[38] On the other hand, opponents of the practice have stated that the motive for the policy was financial.[39] In reality, a reasonable person can see that the policy effectuated both ends. It made the violators comply with the town's safety standards while charging them fees for the proper permits. Furthermore, a home with a pool will have higher real estate taxes, which is a residual monetary benefit to the town. However, an argument can be made that the monetary benefit is trivial when considering the estimated budget for the town in 2011 was $88,637,642.00.[40] Regardless, officials in surrounding municipalities have taken note of this practice.[41] While officers in "[l]arger communities, with more parcels and permits to check, express[] greater reluctance" and prefer to catch code violators the

[33] *Compare* Freedman & Van Sant, *supra* note 1, *with* Nichols, *supra* note 31.

[34] Nichols, *supra* note 31 (stating that "[t]his is public information").

[35] Freedman & Van Sant, *supra* note 1.

[36] *Id.*

[37] *Id.*

[38] *Id.* (stating that they only looked at pools "because of safety concerns. Without permits and the required inspections, pools can be hazards . . . because there's no way to tell whether . . . such pools meets code and state safety regulations").

[39] *Id.* (noting that Lillie Coney, an associate director of the Electronic Privacy Information Center, believes "Google Earth . . . has become, like other satellite image services, a prying eye for cash-hungry local governments").

[40] TOWN OF RIVERHEAD, http://www.riverheadli.com (last visited Oct. 2, 2010) (click on Tentative Budget 2011 link; then go to Page E for the itemized budget).

[41] Freedman & Van Sant, *supra* note 1.

complaint driven way,[42] others see it as a creative adaptation to the current policies. Either way, "[g]overnment officials claim anyone can use these tools, and aerial imaging helps detect violations and solve problems faster."[43] Thus, the real debatable issue is not the motive of the policy, but the constitutionality of the practice.

Many municipalities utilize some sort of aerial photography tool, typically GIS (geographic information system), that incorporates satellite imaging.[44] These systems are generally used by the tax assessor or planning department.[45] These are departments within a municipality which utilize satellite technology daily, albeit without the controversy attached to its use. This is probably a result of the fact that these GIS programs are utilized for informational purposes and not for regulatory purposes. It should be noted that these GIS programs cost thousands of dollars to implement and maintain. In contrast, the basic version of Google Earth is a free web-based application, available to anyone with a computer and an internet connection. Therefore, it does not appear that one can contend that utilizing Google Earth is in effect a misappropriation of tax dollars. Hence, it must be the use of satellite imagery for regulatory purposes that does not appeal to society. Therefore, when the code enforcement division of a municipality utilized satellite imagery, via a free service (Google Earth), it was inevitable that a debate about invasion of privacy and the Fourth Amendment sprung to life.

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[42] *Id.*

[43] Nichols, *supra* note 31.

[44] *See, e.g.*, *Nassau County Land Records Viewer*, NASSAU COUNTY, http://www.nassaucountyny.gov/mynassauproperty/main.jsp (last visited Oct. 18, 2010) (providing public records, including photos and satellite images, for properties located in Nassau County, New York); *Town of Huntington Land Mgmt. Info*., TOWN OF HUNTINGTON, http://tohgis.town.huntington.ny.us/landmenu.asp (last visited Oct. 18, 2010) (providing a GIS system for the Town of Huntington located in Suffolk County, New York that depicts, among other things, satellite imagery of properties located within the town); *Southampton Town Geographic Information Systems*, TOWN OF SOUTHAMPTON, http://www.southamptontownny.gov/content/760/762/2601/2725/798/1001/3070/default.aspx (last visited Oct. 18, 2010) (providing a free service as well as a more advanced paid service to users, allowing access to a variety of GIS web mapping applications that contain detailed information and satellite imagery for properties located in the Town of Southampton, Suffolk County, New York).

[45] *California GIS Map & Information Sites*, COORDINATED LEGAL, http://www.coordinatedlegal.com/gis.html (last visited Nov. 12, 2010).

III. FOURTH AMENDMENT: KEEPING PACE WITH TECHNOLOGY

Throughout the past century, the United States Supreme Court has had to grapple with the effects of the increase in technology, its use and its subsequent effect on the Fourth Amendment. The Fourth Amendment guarantees "[t]he right of the people to be secure in their persons [and] houses . . . against unreasonable searches and seizures, shall not be violated."[46] However, with the advent of new and increasingly more sophisticated technology, there was a shift in what is considered an unreasonable search and seizure. Thus, throughout the years, the Supreme Court has had to determine the "limits there are upon . . . technology to shrink the realm of guaranteed privacy."[47] Typically, the cases concerning this issue involved the use of technology by law enforcement.

One of the earliest Supreme Court cases illustrating the effects of technology on the Fourth Amendment was *Olmstead v. United States*.[48] *Olmstead* suggested "that the Fourth Amendment's reach . . . 'turn[ed] upon the presence or absence of a physical intrusion into any given enclosure.' "[49] *Olmstead* was decided in 1928 and it was not until 1967 that the Court revisited this issue and determined that a physical trespass was not a required element to prove an invasion of privacy.[50] In *Katz v. United States*,[51] the Supreme Court overruled earlier precedent regarding technology and the Fourth Amendment when it discarded the physical intrusion approach in favor of the privacy interest approach.[52] The writing was on the wall, as it was noted "that the meaning of [the] Fourth Amendment . . . must change to

[46] U.S. CONST. amend IV.

[47] Kyllo v. United States, 533 U.S. 27, 33-34 (2001) (noting "[f]or example . . . the technology enabling human flight has exposed to public view . . . uncovered portions of the house and its curtilage that once were private").

[48] 277 U.S. 438, 466 (1928) (holding that the wiretapping of a telephone line was not a violation of the Fourth Amendment).

[49] United States v. Knotts, 460 U.S. 276, 280 (1983) (quoting Katz v. United States, 389 U.S. 347, 353 (1967)).

[50] *Knotts*, 460 U.S. at 280 (overruling *Olmstead* by stating "that the Fourth Amendment's reach 'cannot turn upon the presence or absence of a physical intrusion into any given enclosure' ") (quoting *Katz*, 389 U.S. at 353).

[51] 389 U.S. 347 (1967).

[52] *Id.* at 352-53.

keep pace with the march of science."[53]

Additionally, the Court set forth the two part test, still followed today, for determining if there has been a Fourth Amendment violation.[54] The first part is whether "the individual has shown that 'he seeks to preserve something as private.' "[55] The second part is whether "the individual's expectation [of privacy], viewed objectively, is justifiable under the circumstances."[56] This two part test must be satisfied in the affirmative for an individual to have a meritorious cause of action for a Fourth Amendment invasion of privacy claim. However, with the advent of new technology and the multitude of scenarios that may arise from its use, the *Katz* test must be utilized in concert with other Supreme Court decisions and case law.

At first glance, it would appear that a Riverhead citizen's claim of invasion of privacy against the municipality may have merit. For instance, if the citizen put up a fence, hedge row or arborvitaes hiding the view of his backyard, from public view, this could prove that he or she intended the pool area to be private, thus, satisfying Part I of the *Katz* test.[57] Furthermore, a reasonable argument can be made that society, or an objective person, would regard the backyard, especially the pool area, as an area where one would have an expectation of privacy; thus, satisfying Part II of the *Katz* test. However, the determination of the constitutionality of this policy would not simply begin and end with the *Katz* test. Due to the existence of other relevant and more recent case law, this test would be but one facet of the inquiry. Furthermore, the claim would be against the Town of Riverhead and its code enforcement division, which would add another dimension to the analysis.

While the majority of case law focuses on "law enforcement"

[53] United States v. Garcia, 474 F.3d 994, 997 (7th Cir. 2007) (commenting on the fact that this has been the credence of the Supreme Court ever since *Katz v. United States*).

[54] *Knotts*, 460 U.S. at 280-81.

[55] *Id.* at 281 (alteration in original) (quoting *Katz*, 389 U.S. at 351). The Court pointed out that "[w]hat a person knowingly exposes to the public, even in his own home . . . is not a subject of Fourth Amendment protection . . . [b]ut what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected." *Katz*, 389 U.S. at 351.

[56] *Knotts*, 460 U.S. at 281 (quoting *Katz*, 389 U.S. at 353) (explaining that the second part of the test can also be understood as "whether the individual's subjective expectation of privacy is one that society is prepared to recognize as reasonable").

[57] Rawlings v. Kentucky, 448 U.S. 98, 105 (1980) (holding that when dealing with the expectation of privacy, a court must look at if the one who is claiming a violation "took normal precautions to maintain his privacy").

and the Fourth Amendment, there does not appear to be any reason why the letter of the law would be applied differently to other government agencies. The code enforcement division is an integral part of local government and plays a significant part in "protecting the health, safety and welfare of the community."[58] Accordingly, this mantra is followed by the Town of Riverhead's code enforcement division.[59] The Town's website states that "Code Enforcement Officer[s] . . . enforce the Town Code, Property Maintenance Code and Parking Regulations through measures and procedures that emphasize compliance."[60] The ultimate goal is the utilization of "fair, consistent and equitable enforcement measures while protecting the constitutional rights of all Americans."[61]

The Fourth Amendment does not prohibit law enforcement "from augmenting the sensory faculties bestowed upon them at birth with such enhancement as science and technology [can] afford[]."[62] The problem arises when the advancement of technology has a *significant* impact on the application of a constitutional right.[63] The Supreme Court has "held that the application of the Fourth Amendment depends on whether the person invoking its protection can claim a justifiable, a reasonable, or a legitimate expectation of privacy that has been invaded by government action."[64]

In 2001, the Supreme Court decided *Kyllo v. United States*,[65]

[58] Harry M. Hipler, *Special Magistrates in Code Enforcement Proceedings: Local Government Agents or Arbiters of Fairness and Justice?*, 38 STETSON L. REV 519, 519, 539 (2009) ("Code violations . . . can affect . . . neighborhoods' aesthetics, stability, and property value. If code violations remain unchecked and uncorrected, a once-solid neighborhood can turn into vacant buildings and foreclosed properties. If property values decline, there can be a drop in tax revenue and spending for schools, non-school services, and local development.").

[59] *Code Enforcement*, TOWN OF RIVERHEAD, http://www.riverheadli.com/code.html (last visited Oct. 2, 2010) (regarding the Code Enforcement Division, its purpose is to "ensure[] public safety and promote[] the highest achievable quality of life for the Town of Riverhead's residents, business owners and tourists").

[60] *Id.*

[61] *Id.*

[62] *Knotts*, 460 U.S. at 282.

[63] *Kyllo*, 533 U.S. at 33, 34 ("It would be foolish to contend that the degree of privacy secured to citizens by the Fourth Amendment has been entirely unaffected by the advance of technology.").

[64] *Knotts*, 460 U.S. at 280 (internal citations omitted).

[65] 533 U.S at 40 (holding that the use of sense enhancing technology to gather information regarding the interior of a home that could not have been obtained through visual surveillance constituted a search under the Fourth Amendment).

in which the Court stated that "[w]here . . . the Government uses a device that is not in general public use, to explore details of a private home that" could not be obtained by visual surveillance, it constitutes a search.[66] The implications of this statement, which ambiguously favors technology, leaves open the possibility of the Court revisiting the tension between technology and the right to privacy as surveillance devices become more available.[67] Furthermore, this open-ended statement creates confusion as to what new devices could be utilized for surveillance purposes, as technology is ever increasing. Eight years ago, the satellite technology now accessible on the web was not available to the public; it was utilized by our military and intelligence agencies. However, now it is in general public use, offered for free on the internet. Therefore, shouldn't its use be deemed constitutional? For example, Riverhead utilized Google Earth, a device in general public use, to explore details of a private home (backyards). Under *Kyllo*, it would appear that Riverhead's use of Google Earth would be constitutional. However, this conclusion contradicts earlier Supreme Court case law.

Riverhead's use of Google Earth to locate illegal pools would appear to be an invasion of privacy under the *Katz* standard, but not according to the *Kyllo* standard. Therefore, the issue becomes which standard should govern. In this instance, the *Kyllo* standard should govern because it is the more recent case law on Fourth Amendment jurisprudence. Additionally, it is more analogous to the situation in Riverhead with regard to technology and privacy interests. However, further inquiry is needed to determine how this policy comports with other recent case law and well-settled doctrines.

In a recent Seventh Circuit Court of Appeals case, the court acknowledged the ever-changing relationship between technology and the Fourth Amendment when it noted, "[s]hould government someday decide to institute programs of mass surveillance . . . it will be time . . . to decide whether the Fourth Amendment should be interpreted to treat such surveillance as a search."[68] Would the policy by Riverhead Town utilizing Google Earth to "sweep" the town for

[66] *Id.* at 27.

[67] *Kyllo*, 533 U.S. at 47 (Stevens, J., dissenting) ("[I]t seems likely that the threat to privacy will grow, rather than recede, as the use of intrusive equipment becomes more readily available.").

[68] *Garcia*, 474 F.3d at 998 (stating, however, that currently "[t]here is a tradeoff between security and privacy, and often it favors security").

illegal pools constitute "mass surveillance?" A definition for "mass surveillance" was not given by the court; however, Black's Law Dictionary defines surveillance as "observation . . . of a person or place in the hope of gathering evidence."[69] Thus, mass surveillance would be surveillance on a grand scale. There is a plausible argument that Riverhead's policy would fall within the meaning of that term.

Historically, the Supreme Court has had to redefine the scope of the Fourth Amendment to keep pace with technology.[70] The Court switched from the physical intrusion approach in favor of the privacy approach.[71] Furthermore, the Court has adopted standards, *Kyllo* and *Katz*, in order to determine whether a particular action is considered an unreasonable search and seizure. However, with the growth of technology came an escalation of ambiguity as to what would be considered unconstitutional. Is the use of satellite imaging by a governmental agency to regulate its citizens constitutional? The Supreme Court has yet to decide a case on point, so there is no governing precedent for lower courts to follow and as such it is open for debate. Nonetheless, if the surveillance is of a residence, one should consider the longstanding doctrines of open fields and curtilage.

IV. PROTECTING THE CASTLE: OPEN FIELDS OR CURTILAGE

It is well settled that the home warrants the utmost privacy and is protected under the Fourth Amendment.[72] However, the home has been considered to go beyond the four walls of the actual dwelling and include surrounding areas.[73] Not all of these areas surrounding the home are considered protected for Fourth Amendment purposes, but only those within the curtilage.[74]

[69] BLACK'S LAW DICTIONARY (9th ed. 2009).

[70] *See Katz*, 389 U.S. at 352-53 (discarding the physical intrusion approach and adopting the privacy approach).

[71] *Id.*

[72] *See* Oliver v. United States, 466 U.S. 170, 178 (1984) (recognizing that the Framers intended that the sanctity of the home "be free from arbitrary government interference").

[73] *Id.* at 180 (noting that the curtilage "has been considered part of home itself for Fourth Amendment purposes").

[74] *Id.* (reaffirming that "no expectation of privacy legitimately attaches to open fields").

A. Curtilage

Curtilage is defined as "[t]he land or yard adjoining a house, usu[ally] within an enclosure."[75] This is a broad definition, as the "land or yard adjoining the house" can be construed vaguely and can include large swathes of land. The Supreme Court stated that "[a]t common law, the curtilage is the area to which extends the intimate activity associated with the 'sanctity of a man's home and the privacies of life.' "[76] The scope of curtilage has been refined but it is still the same in principle. Today, curtilage is considered "an area of domestic use immediately surrounding a dwelling and usually but not always fenced in with the dwelling."[77]

In an effort to clear up any ambiguities with regard to the scope of curtilage, the Court in *United States v. Dunn*[78] laid out a four part analysis.[79] In determining whether a particular search took place within the curtilage, a court must analyze:

> (1) the proximity of the area claimed to be curtilage to the home; (2) whether the area is included within an enclosure surrounding the home; (3) the nature of the uses to which the area is put; and (4) the steps taken by the resident to protect the area from observation by people passing by.[80]

The analysis starts with the first prong which is the proximity test.[81] With regard to swimming pools, these are typically proximate to a house. However, at what distance is an improvement considered proximate? Would a shed, detached garage or barn be considered proximate? In certain circumstances it has been held that a barn, physically separate from the house, does not enjoy Fourth Amendment protection because it is not within the curtilage of the home.[82]

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[75] BLACK'S LAW DICTIONARY (9th ed. 2009). Further defining curtilage, as it pertains to the Fourth Amendment, as "an area usu[ally] protected from warrantless searches." *Id*.

[76] *Oliver*, 466 U.S. at 180 (quoting Boyd v. United States, 116 U.S. 616, 630 (1886)).

[77] United States v. LaBerge, 267 F. Supp. 686, 692 (D. Md. 1967).

[78] 480 U.S. 294 (1987).

[79] *Id.* at 301.

[80] United States v. Pace, 955 F.2d 270, 274 n.2 (5th Cir. 1992) (quoting *Dunn*, 480 U.S. at 301).

[81] *Dunn*, 480 U.S. at 301.

[82] *Pace*, 955 F.2d at 272.

This is because it did not pass the other prongs of the analysis.[83] As such, there are exceptions to the proximity factor, as each factor in the analysis must be considered.

The second prong of the analysis is "whether the area is included within an enclosure surrounding the home."[84] As noted by the Supreme Court, "for most homes, the boundaries of the curtilage will be clearly marked; and the conception defining the cartilage—as the area around the home to which the activity of home life extends—is a familiar one easily understood from our daily experience."[85] One example of such a boundary is a fence. A fence is considered significant "as . . . fences generally 'serve[] to demark a specific area of land immediately adjacent to the house that is readily identifiable as part and parcel of the house.' "[86] This prong can correlate and sometimes overlap the fourth prong of the analysis. Examples of this would be the erection of a fence or installation of a natural hedge row. These features will tend to demarcate an area one would consider within the curtilage as well as protect the area from the observation of people walking by.

The third prong hinges on the "nature of the uses to which the area is put."[87] Typically, these uses include "intimate activit[ies] associated with the sanctity of a man's home and privacies of life."[88] It would appear reasonable to say that the use of a swimming pool would fall within the intimate activities category. Families tend to spend a lot of time around their swimming pools, especially in the summer months, to which a reasonable person would expect privacy. The swimming pool is an amenity utilized for many activities such as swimming, sun bathing, relaxing and socializing with friends and family. These activities as well as other legal activities that occur within the curtilage should enjoy the protection of the doctrine. On the other hand, if an area is utilized for illegal activities, then one cannot presume to be protected by the doctrine of curtilage.[89] There-

[83] *Id.* at 274 (explaining that in *Pace*, "the officers had evidence that the barn was not being used in connection with the 'intimacies of the home,' " but rather it was being used for illegal purposes).

[84] *Id.* at 274 n.2 (quoting *Dunn*, 480 U.S. at 301).

[85] *Dunn*, 480 U.S. at 302 (quoting *Oliver*, 466 U.S. at 182 n.12).

[86] *Pace*, 955 F.2d at 275 (alteration in original) (quoting *Dunn*, 480 U.S. at 302).

[87] *Id.* at 274 n.2 (quoting *Dunn*, 480 U.S. at 301).

[88] *Id.* at 275 (quoting *Oliver*, 466 U.S. at 180) (internal quotation marks omitted).

[89] *Id.* at 275-76.

fore, if having an illegal pool constitutes an illegal activity under this principle, then the violator would have no recourse.

The fourth prong analyzes "the steps taken by the resident to protect the area from observation by people passing by."[90] As mentioned previously, this prong can work in concert with the second prong of the analysis such that some courts utilize three elements by combining the second and fourth elements. Typically, satisfying the fourth prong will satisfy the second prong. The steps taken by residents to protect the area from observation from people passing by include erecting fences and installing hedges, bushes and trees which, in addition, typically delineate an area considered intimately associated with the home. There is an implied intent to maintain privacy when such steps are taken. However, the problem with this prong is that it is vague in its meaning of who constitutes a passerby. There is no elaboration between whether this embodies all passersby or just ones at street level.

The Court pointed out that these factors are not a strict guideline but yet an "analytical tool[]" to help determine "whether the area in question is so intimately tied to the home itself that it should be placed under the home's 'umbrella' of Fourth Amendment protection."[91] It is noted that "[t]he extent of the curtilage to which the Fourth Amendment protection attaches is not unlimited[,]" and that the boundaries are determined "by 'factors that bear upon whether an individual reasonably may expect that the area in question should be treated as the home itself.' "[92] However, the main consideration in these cases concerns "whether the area harbors the intimate activity associated with the sanctity of a man's home and privacies of life."[93]

Accordingly, it appears that, at the very least, a swimming pool would be considered to fall within the area known as curtilage and be afforded Fourth Amendment protection.[94] However, there are holes in the *Dunn* analysis. As previously discussed, it is not specifically mentioned whether the fourth prong of the analysis applies to observation from publicly navigable airspace. Therefore, this doc-

[90] *Id.* at 274 n.2 (quoting *Dunn*, 480 U.S. at 301).
[91] *Dunn*, 480 U.S. at 301.
[92] *Pace*, 955 F.2d at 275 (quoting *Dunn*, 480 U.S. at 300).
[93] *Id.* (quoting *Oliver*, 466 U.S. at 180) (internal quotation marks omitted).
[94] *Dunn*, 480 U.S. at 300 ("[T]he Fourth Amendment protects the curtilage of a house and . . . the curtilage is determined by factors that bear upon whether an individual reasonably may expect that the area in question should be treated as the home itself.").

trine cannot be utilized in a vacuum. In addition to the *Dunn* test, there is other case law and doctrines that apply and need to be considered.

Furthermore, the doctrine of curtilage is limited in scope as not all areas of one's property fall within its protection. Property that falls outside the curtilage may be subject to the open fields doctrine. The Court has shown that "government[] intrusion upon the open fields is not one of those 'unreasonable' searches proscribed by the text of the Fourth Amendment."[95] The doctrine of curtilage typically cannot be invoked when the "open fields" or "plain view" doctrines are in play.

B. Open Fields

The open fields doctrine is a "rule [that] permit[s] a warrantless search of the area outside a property owner's curtilage."[96] The Supreme Court first articulated this doctrine in *Hester v. United States*.[97] In *Hester*, the Court stated that "the special protection accorded by the Fourth Amendment to the people . . . is not extended to the open fields."[98] The distinction between "open fields" and the curtilage of the home was laid out in *Oliver v. United States*,[99] where the Court stated that "[o]pen fields are [not] protected [ ] under the text of the Fourth Amendment . . . [because it] protect[s only] those areas in which individuals have a 'reasonable expectation of privacy.' "[100] In essence, open fields are considered to be outside the realm of privacy, in areas in which a reasonable person would not expect to have privacy. These "open fields" may or may not be within the public view.

On the other hand, "[t]he curtilage of the home . . . was distinguished from open fields in the common law, a distinction the Court in *Oliver* took to mean that 'only the curtilage, not the neighboring open fields, warrants the Fourth Amendment protections that attach to the home.' "[101] This is premised on the fact that "open

[95] *Id.* at 303-04 (quoting *Oliver*, 466 U.S. at 177).
[96] BLACK'S LAW DICTIONARY (9th ed. 2009).
[97] 265 U.S. 57, 59 (1924).
[98] *Id.*
[99] 466 U.S. 170 (1984).
[100] *Pace*, 955 F.2d at 274-75 (quoting *Oliver*, 466 U.S. at 176 n.6).
[101] *Id.* at 275 (quoting *Oliver*, 466 U.S. at 180).

fields do not provide the setting for those intimate activities that the Amendment is intended to shelter from government interference or surveillance."[102]

Furthermore, "the rule of *Hester v. United States* . . . may be understood as providing that an individual may not legitimately demand privacy for activities conducted out of doors in fields, except in the area immediately surrounding the home."[103] Accordingly, there is "no constitutional difference between [ ] observations conducted while in a public place and while standing in the open fields."[104] Following this methodology, there would be no constitutional infringement when satellite technology is utilized to search "open fields," as they are afforded less protection than that of the area constituting curtilage.

In conclusion, if the area subject to surveillance is located in "open fields" then no privacy interest exists. On the other hand, if the area is located in the "curtilage" then a privacy interest does exist. Therefore, some areas of an improved parcel would be given greater protection depending on whether it constitutes open fields or curtilage. In general, the pool area would appear to be within the curtilage of a home, thereby, warranting a heightened sense of privacy. However, with regard to curtilage, there is no hard and fast rule that applies to observation of the curtilage from publicly navigable airspace which is what one can observe utilizing Google Earth. Therefore, it appears that the doctrine of curtilage has limitations with regard to the matter at hand.

C. Recent Case Law – *Dow Chemical Company* & *Ciraolo*

The Supreme Court in two recent cases, *Dow Chemical Company v. United States* and *California v. Ciraolo*, decided on the same day, tackled the issues regarding advanced methods of surveillance,

[102] *Oliver*, 466 U.S. at 179.

[103] *Id.* at 178; *see, e.g.*, Air Pollution Variance Bd. of the State of Colorado v. Western Alfalfa Corp., 416 U.S. 861, 865 (1974) (finding that a field inspector who made observations and took readings of the smoke emanating from a building's smoke stacks was not a violation of the company's Fourth Amendment rights; the Court "refused to extend the Fourth Amendment to sights seen in the open fields," noting that anyone in the city could see the same thing).

[104] *Dunn*, 480 U.S. at 304.

particularly aerial photography, and their relationship to the Fourth Amendment.[105]

1. Dow Chemical Company v. United States

Dow Chemical operated a facility that manufactured chemicals and, as a result, was subject to inspections by the Environmental Protection Agency (EPA).[106] The EPA requested such an inspection of the facility, which encompassed approximately 2,000 acres, and Dow Chemical denied the request.[107] Subsequently, the EPA hired a commercial aerial photographer to fly over the facility and take aerial pictures.[108] The photographer utilized a standard aerial mapping camera to take pictures from as close as 1,200 feet above the facility, in publicly navigable airspace.[109] Dow Chemical brought suit "conten[ding] that taking aerial photographs constituted a search without a warrant, thereby violating [their] rights under the Fourth Amendment."[110] The Court held that Dow Chemical's Fourth Amendment rights were not violated.[111] It was reasoned that "[a]ny person with an airplane and an aerial camera" could have conducted similar surveillance.[112] Applying this to the current problem, there would be no violation of the Fourth Amendment because the same surveillance that a municipality was using on its citizens could be conducted by *any person with a computer and the internet*.

Dow Chemical claimed that it had a reasonable expectation of privacy and that the prongs of the *Oliver* test were satisfied, as evidenced by the existence of fencing and security details that made

[105] *See Dow Chem. Co.*, 476 U.S. at 229 (granting certiorari to hear a case concerning aerial photography without a warrant of a commercial property and its relationship with the Fourth Amendment); *Ciraolo I*, 476 U.S. at 209 (granting certiorari to hear a case concerning aerial photography of a residential property without a warrant and its relationship with the Fourth Amendment).

[106] *Dow Chem. Co.*, 476 U.S. at 229.

[107] *Id.*

[108] *Id.*

[109] *Id.*

[110] *Id.* at 234.

[111] *Dow Chem. Co.*, 476 U.S. at 239 ("[T]he taking of aerial photographs of an industrial plant complex from navigable airspace is not a search prohibited by the Fourth Amendment.").

[112] *Id.* at 231.

ground level observation of the premises obsolete.[113] However, the Court's rebuttal was that they did not take any precautions against aerial intrusion. Some might argue that this is an unreasonable contention because preventing aerial intrusion, especially when this intrusion takes place in public airspace, would be difficult. For property owners who would want to shield their curtilage, such as a backyard or pool area, they would have to install some sort of covering. First, this could prove to be a financial burden. Second, there could be an aesthetic issue that accompanies such structures. Finally, permanent structures would have to be approved by the building department of the local municipality,[114] so in essence the municipality would still be the final decision maker in a citizen's effort to maintain privacy.

Dow Chemical claimed that the EPA lacked the authority to utilize tools such as aerial photography for site inspections.[115] However, the Court disagreed, stating that "[r]egulatory or enforcement authority generally carries with it all the modes of inquiry and investigation traditionally employed or useful to execute the authority granted."[116] Additionally, the Court made it a point to mention that "[t]he Government [was] seeking these photographs in order to regulate . . . Dow."[117] Similarly, a municipality's code enforcement department would utilize satellite technology to regulate the codes of their respective municipality.

The Court added a side note to its holding, possibly realizing that the next step past aerial photography would be satellite imaging. The Court stated "[i]t may well be, as the Government concedes, that surveillance of private property by using highly sophisticated surveillance equipment not generally available to the public, such as satellite technology, might be constitutionally proscribed, absent a war-

[113] *Id.* at 229 (stating that Dow, in addition to elaborate ground level security, investigates any low level aircraft that fly over the complex).

[114] *See, e.g.*, Washington Commons, LLC v. City of Jersey City, 7 A.3d 225, 228 (N.J. Super. Ct. App. Div. 2010) (stating that New Jersey's municipal law allows governing municipal bodies the discretion to oversee and require permits for construction of structures and may even pursue action to frustrate construction of structures not in compliance with their local laws).

[115] *Dow Chem. Co.*, 476 U.S. at 230 (alleging that the EPA's use of aerial photography was not only a violation of the Fourth Amendment but beyond its investigative authority).

[116] *Id.* at 233.

[117] *Id.* at 232.

rant."[118] Thus, in 1986, one could have contended, based on this dicta, that warrantless satellite surveillance constituted an unconstitutional search. However, it should be noted that when this case was settled, satellite technology was not available to the public and was used primarily by the military and intelligence agencies. Currently, satellite technology is easily accessible by the public, therefore, applying the holding from *Dow Chemical*, the use of it by a regulatory agency could be construed as constitutional.

A significant attribute of the *Dow Chemical* case is the fact that it involves a commercial property as opposed to a residential property. In *Dow Chemical*, it is reasoned that commercial property is afforded less protection than a private house.[119] Furthermore, regulation of a commercial property is afforded "greater latitude" with regard to searches.[120] This "reflects the fact that the expectation of privacy that the owner of commercial property enjoys . . . differs significantly from the sanctity accorded an individual's home."[121] Thus, it follows that if the Court were to find that satellite surveillance of a commercial property was a violation of the Fourth Amendment, then satellite surveillance of a residential property would also be unconstitutional. However, the Court found in this case that aerial photography of a commercial property was not a violation of the Fourth Amendment.[122] Therefore, as it applies to commercial properties, it would appear that satellite surveillance of these properties within a municipality's jurisdiction does not violate the Fourth Amendment.

2. California v. Ciraolo

The other case, decided on the same day as *Dow Chemical*, was *California v. Ciraolo*.[123] This case involved aerial observation, similar to the aforementioned case, with the major difference being

[118] *Id.* at 238.

[119] *Id.* ("[U]nlike a homeowner's interest in his dwelling, 'the interest of the owner of commercial property is not one in being free from any inspections.' " (quoting Donovan v. Dewey, 452 U.S. 594, 599 (1981)))

[120] *Dow Chem. Co.*, 476 U.S. at 237 (pointing out "that the Government has 'greater latitude to conduct warrantless inspections of commercial property' " (*Dewey*, 452 U.S. at 598)).

[121] *Dewey*, 452 U.S. at 598-99.

[122] *Dow Chem. Co.*, 476 U.S. at 239.

[123] *Ciraolo I*, 476 U.S. 207 (1986).

that it involved observation of a residential dwelling as opposed to a commercial property.[124] The issue in *Ciraolo* was "whether the Fourth Amendment [was] violated by aerial observation without a warrant from an altitude of 1,000 feet of a fenced-in backyard within the curtilage of a home."[125] The Supreme Court, reversing the Court of Appeals, held that warrantless aerial observation of a home did not violate the Fourth Amendment.[126] The Court of Appeals based its decision on the fact that the backyard was within the curtilage and that the "fence[] constituted 'objective criteria from which we may conclude . . . manifested a reasonable expectation of privacy by any standard.' "[127] Overruling this basis, the Supreme Court made the distinction that the fence did not shield the backyard from some observations, but that "[i]t can reasonably be assumed that the . . . fence was placed to conceal the [backyard] from at least street level views" and it served this purpose as far as ground level traffic was concerned.[128] Furthermore, it is held "[t]hat [just because] the area is within the curtilage does not itself bar all police observation."[129]

In *Ciraolo*, the police had a reasonable belief that the defendant was growing marijuana in his fenced in backyard.[130] As a result of the view restricting nature of the fence, the police flew a plane, within navigable airspace, over the backyard in question to perform aerial observation.[131] A warrant was then issued based upon photographs taken during the aerial observation.[132] Defense argued that this warrant was based on an illegal search and as such was invalid,

[124] *Compare Ciraolo I*, 476 U.S. at 209, *with Dow Chem. Co.*, 476 U.S. at 229.

[125] *Ciraolo I*, 476 U.S. at 209.

[126] *Id.* at 210. The California Court of Appeals reversed the trial court's denial of respondent's motion to suppress the evidence of the search and held that the warrantless aerial observation of his home violated the Fourth Amendment. *Id.*

[127] *Id.* (quoting People v. Ciraolo, 161 Cal. App. 3d 1081, 1089 (1st Dist., Div. 5 1984) [hereinafter *Ciraolo II*]).

[128] *Id.* at 211.

[129] *Ciraolo I*, 476 U.S. at 213.

[130] *Id.* at 209. The local police received a tip that respondent was growing marijuana in his backyard and upon investigating the tip they went to the property but were unable to observe the backyard because it was enclosed with two fences. *Id.*

[131] *Id.* The plane was commissioned by the officer assigned to the case who subsequently observed the respondent's backyard from the plane at an altitude of 1,000 feet, which is within navigable airspace. *Id.*

[132] *Ciraolo I*, 476 U.S. at 209. The police used a 35mm camera to photograph the backyard in question and were able to obtain a search warrant in part due to the photographs taken during the flyover. *Ciraolo I*, 476 U.S. at 209.

rendering all the evidence inadmissible.[133]

The Court of Appeals made it a point to mention "that the flyover 'was not the result of a routine patrol conducted for any other legitimate law enforcement or public safety objective, but was undertaken for the specific purpose of observing this particular enclosure within . . . curtilage.' "[134] This statement tends to show that the Court of Appeals would have found the aerial observation constitutional if it was routine and conducted for a public safety objective. Thus, while the Court of Appeals and the Supreme Court had a difference of opinion with regard to this case, it appears from their opinions that they would have agreed that it is not a constitutional violation for a municipality to routinely utilize a form of aerial photography for the furtherance of a public safety objective.

V. MUNICIPALITY: CASE STUDY AND THEORY OF LIABILITY

A municipality is defined as "a primarily urban political unit having corporate status and usually powers of self-government."[135] In essence, a municipality is government on a small, localized scale.[136] When news broke of a municipality utilizing Google Earth to look for code violations within its jurisdiction, people not only in that specific municipality were outraged, but individuals from around the nation voiced their concerns. The fervor could be traced to the fact that if one municipality could implement such a policy, then others may follow. Moreover, what would stop the United States Government from utilizing a similar policy? That is assuming it does not employ similar policies already. The difference here is the scope of the inquiry. While United States citizens can take solace in the fact that the government probably will not perform an "aerial sweep" of all the homes within its borders, a municipality may and, as history dictates, has.

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[133] *Id.* at 210, 212.

[134] *Id.* at 210 (quoting *Ciraolo II*, 161 Cal. App. 3d at 1089).

[135] MERRIAM WEBSTER DICTIONARY, http://www.merriam-webster.com/dictionary/municipality (last visited Nov. 12, 2010).

[136] Jericho Water Dist. v. One Call Users Council, Inc., 887 N.E.2d 1142, 1143 (N.Y. 2008) (noting that a municipality "denotes a unit of local government" and when construed narrowly can "include only entities exercising general governmental functions-i.e., counties, cities, towns and villages").

A. Municipal Inspections

In the past, the Supreme Court has found in favor of allowing municipal inspections on the basis that there was no infringement of an individual's Fourth Amendment rights.[137] In one case, the Court based its decision on the fact that the "routine inspection of the physical condition of private property is a less hostile intrusion than the typical policeman's search for the fruits and instrumentalities of crime."[138] In another case, the majority held that "municipal . . . housing inspection programs 'touch at most upon the periphery of the important interests safeguarded by the Fourth Amendment's protection against official intrusion' because the inspections are merely to determine whether physical conditions exist which do not comply with minimum standards prescribed in local regulatory ordinances."[139] However, recently the Court has changed its position.[140] In *Camara v. Municipal Court of City and County of San Francisco*,[141] the Court held "that administrative searches . . . are significant intrusions upon the interests protected by the Fourth Amendment."[142] Furthermore, the Court noted that it cannot be stated that these administrative searches are less intrusive than, for example, a police search because in many cases a discovery of a code violation may lead to a criminal complaint.[143]

Current case law dictates that the Supreme Court has sided with the "privacy and security of individuals against arbitrary invasions by governmental officials," especially in one's home.[144] However, it should be noted that this line of case law involves a munici-

[137] Camara v. Mun. Court of the City and Cnty. of San Francisco, 387 U.S. 523, 525 (1967) (citing Frank v. Maryland, 359 U.S. 360, 367, 373 (1959)) (stating that in *Frank*, "this Court upheld . . . a state court conviction of a homeowner who refused to permit a municipal health inspector to enter and inspect his premises without a search warrant").

[138] *Id.* at 530.

[139] *Id.* (quoting *Frank*, 359 U.S. at 367).

[140] *Id.* at 530-31 ("We may agree that a routine inspection . . . is a less hostile intrusion than the typical policeman's search . . . [b]ut we cannot agree that the Fourth Amendment interests at stake in these inspection cases are merely peripheral.").

[141] 387 U.S. 523 (1967).

[142] *Id.* at 534. "[W]e hold that administrative searches . . . when authorized and conducted without a warrant procedure lack the traditional safeguards which the Fourth Amendment guarantees to the individual." *Id.*

[143] *Camara*, 387 U.S. at 531 ("Even in cities where discovery of a violation produces only an administrative compliance order, refusal to comply is a criminal offense . . . [and] refusal to permit an inspection is itself a crime. . . .").

[144] *Id.* at 528.

pality's physical intrusion upon an individual's dwelling and is not analogous to the mere observation of the "curtilage" of one's home from a public viewpoint, namely aerial imagery that could be viewed from public navigable airspace. Furthermore, instead of a building inspector physically intruding upon one's property, the inspectors could use the less intrusive satellite imaging to achieve the same ends.

B. Case Study – Riverhead

The municipality which started this controversy is the Town of Riverhead ("the Town"), located on Long Island, in Suffolk County, in the State of New York. According to a 2008 American Community Survey, there were 14,604 housing units in Riverhead.[145] However, it took only one town employee and the program known as Google Earth to search the entire township for illegal pools.[146] Initially, before the media attention, this practice did not seem to be an issue. However, after news broke about this program of surveillance, the Town stated "many residents, together with local and regional community groups, have expressed their objection to and fear of eroding privacy rights by the Town of Riverhead Building Dept. use of virtual globe map and geographic information programs."[147]

On September 8, 2010, within weeks of the story making national headlines, the Town passed a resolution "restricting the use of virtual globe map and geographic information programs."[148] Furthermore, this resolution implemented a policy that "restrict[ed the] use of satellite imagery as the basis or foundation of prosecutions in areas not readily observable from public locations and restricting use of satellite imagery to conduct 'sweeps' in place of field inspections and investigations without [the] approval of the Town Board."[149]

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[145] *American Community Survey*, U.S. CENSUS BUREAU, http://www.factfinder.census.gov/servlet/ACSSAFFFacts?_event=Search&_name=riverhead&_state=04000US36&_county=riverhead&_cityTown=riverhead&_zip=&_sse=on&_lang=en&pctxt=fph&_submenuId=factsheet_1 (last visited Nov. 12, 2010).

[146] Freedman & Van Sant, *supra* note 1.

[147] Riverhead, N.Y., Res. 709 (2010), *available at* http://www.riverheadli.com/TBM.09.08.10.pdf (last visited Nov. 12, 2010).

[148] *Id.* (adopting, by a 5-0 vote, a policy titled "Policy Regarding Use of Virtual Globe Map and Geographic Information to Initiate or Commence Prosecution for Violation of the Provisions of the Town Code of the Town of Riverhead by Town Departments").

[149] *Id.*

However, the Town did state that it "recognize[d] the need to balance the Town's right to use satellite imagery, particularly in areas of public view . . . for which individuals do not have a reasonable expectation of privacy under the Town's police powers with a resident's right and expectation of privacy in their homes or areas not readily observable from a public location."[150]

According to recent case law, the use of satellite imaging by a municipality to regulate its citizens would be constitutional. Riverhead utilized this method of surveillance, citing safety concerns, to search for the existence of illegal pools but due to public scrutiny decided to discontinue this practice. Looking for pools that are noncompliant in order to bring them into compliance to reduce the possible risk of injury or death appears to be a plausible public safety objective. Thus, this policy should pass constitutional muster, nonetheless, the Town discontinued this practice. Additionally, a conceivable argument can be made that since this tool is available, a municipality should use it. However, by not using this tool does a municipality subject themselves to liability? The code enforcement and building divisions in a municipality are typically responsible for safeguarding its citizens. Therefore, if a person is injured in, for example, an illegal pool and the municipality failed to use all available tools to locate the pool and make it compliant, could it be possible to bring a claim of liability against the municipality?

C. Municipal Liability

"A municipality is a governmental entity entitled to sovereign immunity, but only for some of its functions."[151] This section mainly relates to the functions of the enforcement divisions of a municipality, namely the building and code enforcement departments. As society progresses and the powers exerted by municipalities increase, so do the number of cases brought against municipalities for their roles in safeguarding the public.[152] In addition, more and more courts are

[150] *Id.*

[151] Texas Bay Cherry Hill, L.P. v. City of Fort Worth, 257 S.W.3d 379, 388 (Tex. App. 2008).

[152] Deborah L. Markowitz, Esq., *Municipal Liability for Negligent Inspection and Failure to Enforce Safety Codes*, 15 HAMLINE J. PUB. L. & POL'Y 181, 182 (Spring 1994) ("Since the late 1970's, there have been numerous examples of municipalities that, having undertaken to conduct inspections, are charged for their negligence in failing to uncover violations.").

hearing these cases instead of dismissing them at the outset.

In a recent New York case, the court denied the State's motion for summary judgment, dismissing the claim concerning damages for common law negligence.[153] In this case, New York State conducted investigations of a property which included taking aerial photographs.[154] Subsequently, the claimant was injured and brought suit against the state for failure to perform a reasonable investigation.[155] In the opinion, the court referred to the responsibility of the municipality to perform a "reasonable investigation" and "diligent inspection."[156] In another case, a municipality was "found liable for both compensatory and punitive damages for its failure to inspect . . . and its consequent failure to enforce the [] code."[157] Based on these decisions, it seems that a municipality could be held liable for not performing reasonable, diligent inspections. Can a case be made by a parent of a child who drowns in a neighbor's pool, a pool that is not up to code, on the premise that the Town did not perform their due diligence in finding that this pool existed, thus requiring it to comply with the code? This scenario is not a stretch of reality by any means. As evidenced above, it could be argued that a municipality was negligent for failing to perform a reasonable investigation. Furthermore, an objective person would tend to assume a "reasonable investigation" would have included all the tools at their disposal, including Google Earth. Moreover, in Riverhead's case, their liability is heightened because they have already opened the door to utilizing Google Earth, notwithstanding the fact that they have since adopted a resolution to cease use of this application.

VI. CONCLUSION

Satellite imagery, once an application only available to and utilized by military and intelligence agencies, has become mainstream and available free to the public via multiple web-based servic-

[153] Wynne v. New York, 863 N.Y.S.2d 222, 224 (App. Div. 2d Dep't 2008).

[154] *Id.* at 657 ("Prior to the commencement of the construction, the State conducted investigations of the property to determine if the property was suitable to construct the exit ramp, which consisted of . . . taking aerial photographs.").

[155] *Id.*

[156] *Id.* at 658 ("[T]he claimant raised a triable issue of fact as to whether the State performed a reasonable investigation of the property . . . [and] that a diligent inspection would have disclosed the tank that caused the . . . injury.").

[157] Markowitz, *supra* note 142.

es such as Google Earth. The transition from private to public use brought with it a surge in new and creative ways to utilize and implement this technology in multiple arenas. Law enforcement agencies have been utilizing satellite imaging in furtherance of their duties, including the regulation of crime. It was only a matter of time before municipalities and their respective departments started using satellite imaging to regulate their citizens. This latest trend, as exhibited by the Town of Riverhead, has created a national controversy. Many people feel that their privacy rights are being eroded. Civil libertarians are left wondering at what point technology infringes on our Fourth Amendment rights. Currently, there is no answer to this question. The Supreme Court has yet to decide a case on point with regard to this issue.

Throughout the years, Fourth Amendment jurisprudence has evolved to keep pace with technology. As technology progressed throughout the 20th century, the Court switched from a physical intrusion approach to a privacy interest approach. However, it appears that technology, for the time being, has outpaced case law. The standards set forth in *Katz* for determining if a Fourth Amendment violation has occurred could be construed as antiquated in today's technologically savvy society. The Court in *Kyllo* acknowledged the fact that Fourth Amendment jurisprudence needs to carefully adapt to the changing times.

The most analogous Supreme Court cases regarding the constitutionality of the use of satellite imagery by a municipality for regulatory purposes are *Dow Chemical Company v. United States* and *California v. Ciraolo*. These cases tackled the issues regarding advanced methods of surveillance, particularly aerial photography, and its relationship with the Fourth Amendment. In *Dow Chemical*, the Court held that aerial surveillance of a commercial property did not violate the property owner's constitutional rights.[158] Furthermore, in *Ciraolo*, the Court held that the warrantless aerial observation of the curtilage of a residence did not violate the Fourth Amendment.[159] Thus, applying the respective holdings of these cases to the current issue, it would be constitutional for a municipality to utilize satellite imagery to regulate its citizens.

Furthermore, it is important to acknowledge the doctrine of

[158] *Dow Chem. Co.*, 476 U.S. at 239.
[159] *Ciraolo I*, 476 U.S. at 215.

curtilage. It is arguable that most backyards, especially the pool area, would be considered within the curtilage of the home and afforded Fourth Amendment protection. However, these areas are generally visible from publicly navigable airspace and, as such, would not be constitutionally protected from aerial surveillance, including satellite imaging. Thus, the majority of recent case law shows that surveillance accomplished by satellite imagery, even within a house's curtilage, is constitutional.

Despite the fact that the present use of Google Earth by a municipality to regulate its citizens may not be a popular policy, it is not a violation of a constitutional right. However, the Supreme Court should address this issue because it is a slippery slope and has become an area of concern. As technology increases, many more examples regarding municipalities employing satellite based technology will arise, which in turn, will spark more debates about invasion of privacy. A decision on point would obviate such debates and alleviate concerns by municipalities using satellite based technology. Furthermore, it will allow municipalities to utilize tools at their disposal, bringing them in line with the Twenty-First century and at the same time making government more efficient.